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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/046,677 03/24/98 FURUKAWA

K 614.1889

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WASHINGTON DC 20001

WM02/0328

EXAMINER

AGNEPPA H

ART UNIT

PAPER NUMBER

2642

DATE MAILED:

03/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/046,677

Applicant(s)

FURUKAWA ET AL.

Examiner

Hector A. Agdeppa

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 20) ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1 – 6, 8 – 10, 12, 13, and 15 - 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. in view of Eaton.
2. Regarding claims 1, 2, 6, 10, and 16, Kim et al. teaches a method and device for a remote maintenance system for maintaining a PBX system, wherein the remote maintenance system is connected to a telephone unit 212 and a telephone network i.e. PSTN (col. 3, lines 13 – 24 and Fig. 2), the remote maintenance system having a CPU

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201 for detecting command signals sent from either a telephone unit or the PSTN, which can be considered analogous to the command signal recognition unit claimed by the applicant. (col. 3, lines 28 – 32, and col. 3, line 61 – col. 4, line 12) Furthermore, Kim et al. teaches a CPU 201 controlling a switch circuit 204 so as to connect an incoming call to either the PSTN as in a normal telephone call or to the remote maintenance center 220. (Col. 4, lines 1 – 12, and lines 23 – 41) Finally, CPU 201 has the capability, that can be likened to the telephone service processing unit claimed by the applicant, of processing data for a telephone service indicated by the aforementioned command signals. (col. 6, lines 43 – 52)

3. Regarding claims 3 – 5, 8, 12, 13, and 15 Kim et al. teaches the aforementioned CPU 201 as having a DTMF reception circuit 208 and a tone generating circuit 209 for recognizing and detecting DTMF signals sent by either the telephone unit or the telephone network, wherein the DTMF signals may indicate a telephone service. (col. 87, line 14 – col. 9, line 2)

4. Regarding claim 9, Kim et al., states as well known prior art, a system having a CPU controlling an overall operation of a PBX so as to establish a speech path and perform a variety of functions, a memory ROM and RAM for storing data, and a switch circuit for exchanging all kinds of tone signals, dialing data, and voice data all of which read on voice recording/playback, telephone number entry processing, and file transmission as claimed by the application for the instant invention.

5. With regard to claim 17, which discloses a software means for accomplishing the method claimed in claim 16 of the application for the present invention, it is obvious that

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the system taught by Kim et al. also would operate with the appropriate software means.

What is not taught by Kim et al. is a DTMF or signal transmission inhibition unit.

However, Eaton teaches a DTMF cancellation unit 101 (Fig. 2 and Col. 5, lines 48 – 66) for interrupting or trapping signals passing along a telephone line so as to allow, in one instance, for enhanced services. This cancellation unit basically operates to prevent certain DTMF tones from passing into a telephony network after realizing that the DTMF signal(s) are representative of a service request for example (Col. 5, lines 5 – 18).

It would have been obvious to one skilled in the art to have included such a feature or device in the invention of Kim et al. in that the invention of Kim et al. provides for remote maintenance as does the invention of Eaton, as noted in Col. 7, lines 9 – 13 of Eaton.

6. Claims 7, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. in view of Eaton in view of Meyers.

7. With regard to claims 7, 11, and 14, Kim et al. and Eaton have been discussed above. What Kim et al. and Eaton do not explicitly teach is the use of multiple DTMF detection units and converters.

However, Meyers teaches a system for processing calls having a call center 10, wherein the call center may include one or more DTMF receivers, and other resources for processing calls. Clearly, Meyers reads on the above-mentioned claims of the

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application for the present invention in that the task of detecting and converting signals from a telephone unit or network can be divided among a plurality of DTMF receivers.

It would have been obvious to one skilled in the art at the time the invention was made to have implemented the use of a plurality of DTMF receivers in the combination of Kim et al. and Eaton so as to allow a call processing system to identify tones and signals used by telephone networks and telephone units in multiple countries as noted in Meyers.

Response to Arguments

Examiner agrees with Applicant that Kim et al. does not teach a signal inhibition unit. However, the new reference Eaton discloses such a unit and feature. Furthermore, Applicant argues that no data processing unit is taught by Kim et al. However, Examiner asserts that Kim et al. does teach data processing unit 201 wherein that unit may receive and respond to data and provide certain telephony services as claimed. Furthermore, Eaton teaches a processor 107 that may optionally provide for various telephony services as well. With the inclusion of the Eaton reference, Examiner believes Meyers now solves the deficiencies of Kim et al. and Eaton.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hector A. Agdeppa whose telephone number is 703-305-1844. The examiner can normally be reached on Mon thru Fri 9:30am - 6:00pm.

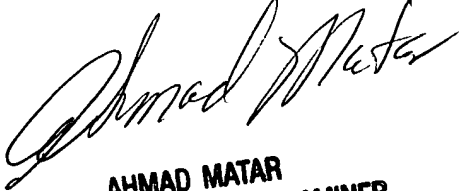
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hector A. Agdeppa whose telephone number is 703-305-1844. The examiner can normally be reached on Mon thru Fri 9:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 703-305-4731. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5403 for regular communications and 703-308-5403 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

H.A.A.
March 23, 2001


AHMAD MATAR
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